Work Order ID 60293

July 1, 2010 11:53:49 AM

Item ID: D3183-044 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Bracket Assembly

Start Date: 02/07/2010 **Start Qty:** 4.00 **Cust Item ID:**

Required Date: 29/07/2010 **Req'd Qty:** 4.00 **Customer:**

Reference: 10-07-01 **Run Start** **Stop**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D3183	Rev C1								
100	BAND SAW	0.00				4	0		
Bandsaw	**Memo**	0.00	B.A 10/07/22						
Jeaspa Bandsaw	Cut blanks: (1.500" x 2.250") 5.500" long								
110	HAAS CNC VERTICAL MACHINING #1	0.00				4	0		AO
HAAS 1	**Memo**	0.00	B.A 10/07/22						
HAAS CNC vertical machine #1	1-Machine D3183-4 as per Folio FA322 and Dwg D3183□Identify as D3183-4□2-Deburr□3-Scribe batch number								
120	QC2- Inspect parts off machine FAI/FAIB	0.00				4	0		
QC	**Memo**	0.00	B.A 10/07/22						
Quality Control									

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3183-044 PAR #: _____ Fault Category: machining NCR: (Yes) No DQA: ✓ Date: 10.08.05

Resolution: Accepted Disposition: use as is QA: N/C Closed: ✓ Date: 10/08/06

NCR: 60293		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B: Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector
10.07.23	110	DIAM OF BEARING ATTACHMENT IS Ø0.3912 ~~0.00~~ FOR (1). DIM 6 = Ø0.392 +0.002 −0.000 R.L. operator error/LOA.	10.07.23 DS 042	Acceptable. BEARING ~~IS~~ SECURED WITH SCREW, NOT PRESS FIT	10/07/23	10/07/23	10.07.23 DS 042	10/07/23

NOTE: Date & initial all entries

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Item Name: Bracket Assembly
Start Date: 02/07/2010 **Start Qty:** 4.00
Required Date: 29/07/2010 **Req'd Qty:** 4.00
Reference:

Accept **Setup** **Start** **Stop**

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run **Start** **Stop**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 QC Quality Control	QC8- Inspect parts - second check	0.00				4	0		
	Memo	0.00							
140 Small Fab Small Fab	Small Fab	0.00							
	Memo Assemble D3183-043 as per Dwg D3183.	0.00							
150 QC Quality Control	QC5- Inspect part completeness to step on W/O	0.00				(4)			
	Memo	0.00							

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Start Date: 02/07/2010 **Start Qty:** 4.00
Required Date: 29/07/2010 **Req'd Qty:** 4.00
Reference:

Accept **Setup** **Start** **Stop**

Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** **Stop**
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 Packaging Packaging	Identify as per dwg & Stock Location: 230	0.00				10/7/27		5	
	Memo	0.00							
170 QC Quality Control	QC21- Final Inspection - Work Order Release	0.00					10/07/28		
	Memo	0.00							

10-7-27 (4)

Picklist Print

July 1, 2010 11:53:48 AM

[redacted]D: 60293

[redacted]t Item: D3183-044

Parent Item Name: Bracket Assembly

Start Date: 02/07/2010
Start Qty: 4.00

Required Date: 29/07/2010
Required Qty: 4.00

Comments: IPP Rev:Pick:A□04.02.18□New issue□KJ/DS□
IPP Rev:B Changed Mat Size 08-06-26 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3121-21 Bolt		Manufactured	No			140	Each	31.0000	2	8	8	10/07/27	
				Location		**Loc Qty**		**Loc Code**					
				ST235		31							
					57376	1							
					59044	30							
D3183-045 Bearing Assembly		Manufactured	No			100	Each	13.0000	2	8	8	10/07/27	
				Location		**Loc Qty**		**Loc Code**					
				ST236		13							
					60152	13							
M174B1.500X02.250 17-4 SS Bar 1.50 X2.250		Purchased	No			140	f	24.5000	0.4583	1.929684	8		
				Location		**Loc Qty**		**Loc Code**					
				MAT031		24.5							
					108309	1							
					113568 ✓	23.5					1.929 6 ft	M.A	10/07/22

17-4 ss bar 1.50 x 2.50

DART AEROSPACE LTD	Work Order:	60293
Description: Bracket	Part Number:	D3183-4
Inspection Dwg: D3183 Rev: C1		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [ ] Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
R0.190	+/-0.030	R0.188	✓			
R0.063	+/-0.010	R0.063	✓			
~~0.188~~ 0.182	+/-0.010	0.187	✓			
0.070	+/-0.010	0.067	✓			
0.100	+/-0.010	0.100	✓			
Ø0.201 x 0.100	+/-0.010	Ø0.201 x 0.102	✓			
~~0.183~~ 0.182	+/-0.010	0.186	✓			
5.32	+/-0.030	5.322	✓			
5.036	+/-0.010	5.036	✓			
2.120	+/-0.010	2.120	✓			
1.290	+/-0.010	1.290	✓			
0.365	+/-0.010	0.365	✓			
0.218	+/-0.010	0.214	✓			
1.030	+/-0.010	1.030	✓			
1.90	+/-0.030	1.890	✓			
1.012	+/-0.010	1.009				
Ø0.201 x 0.100	+/-0.010	Ø0.201 x 0.102	✓			
0.786	+/-0.010	0.777	✓			
Ø0.392	+0.002/-0.000	Ø0.3912	✓			OK 10.07.23
R0.19	+/-0.030	R0.188	✓			
3.954	+/-0.010	3.956	✓			
0.162	+/-0.010	0.162	✓			
R0.19	+/-0.030	R0.190	✓			
R0.25	+/-0.030	R0.250	✓			
4.26	+/-0.030	4.263	✓			
2.800 Calculated dimension	+/-0.030	2.795	✓			
0.162	+/-0.010	0.163	✓			
0.615	+/-0.010	0.614	✓			
0.435	+/-0.010	0.433	✓			
0.200	+/-0.010	0.201	✓			
0.381	+/-0.010	0.384	✓			
0.032	+/-0.010	0.030	✓			

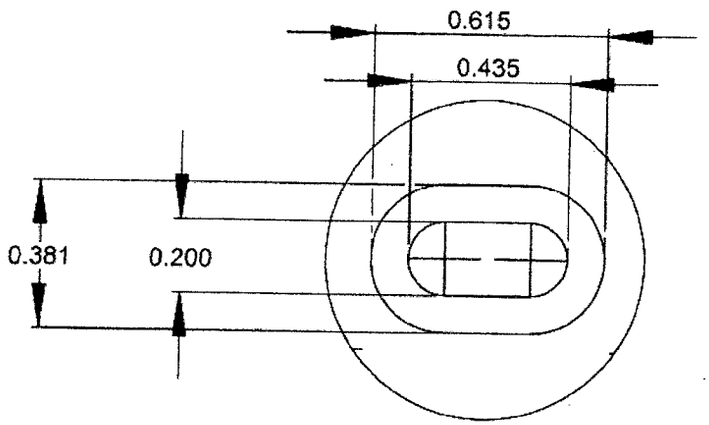
Measured by:	Y.A
Date:	10/07/22

Audited by:	MW
Date:	10/07/23

Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A	03.11.12	New Issue P/O D3183-044	KJ/RF	
B	04.03.15	Changes as per revision C	KJ/JLM/RF	
C	04.06.15	Dimension 2.800 was 2.080; removed 1.155, 0.36 dimensions	KJ/JLM	
D	06.03.09	Dwg Rev update	KJ/JLM	
E	08.01.16	Dimensions revised	KJ/EC/DD	

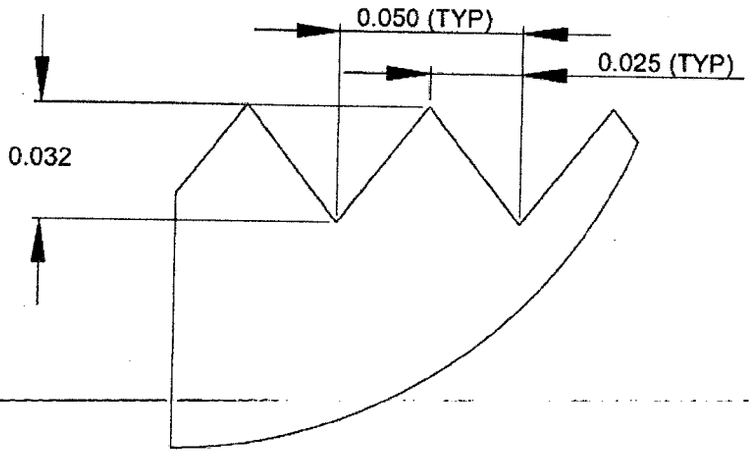
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3183	REV. C SHEET 4 OF 4
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1



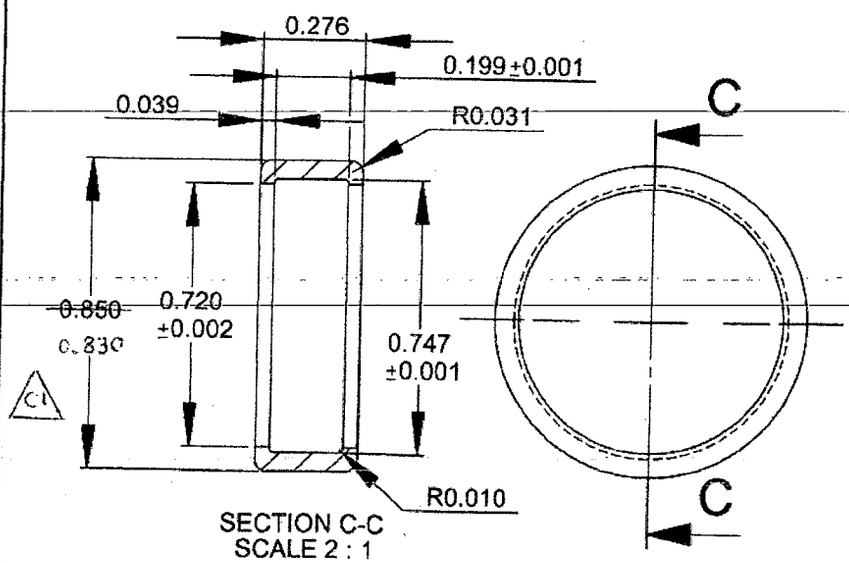
DETAIL A (2 : 1)

w/o 60293

RELEASED
04.03.01



DETAIL B (20 : 1)



SECTION C-C
SCALE 2 : 1

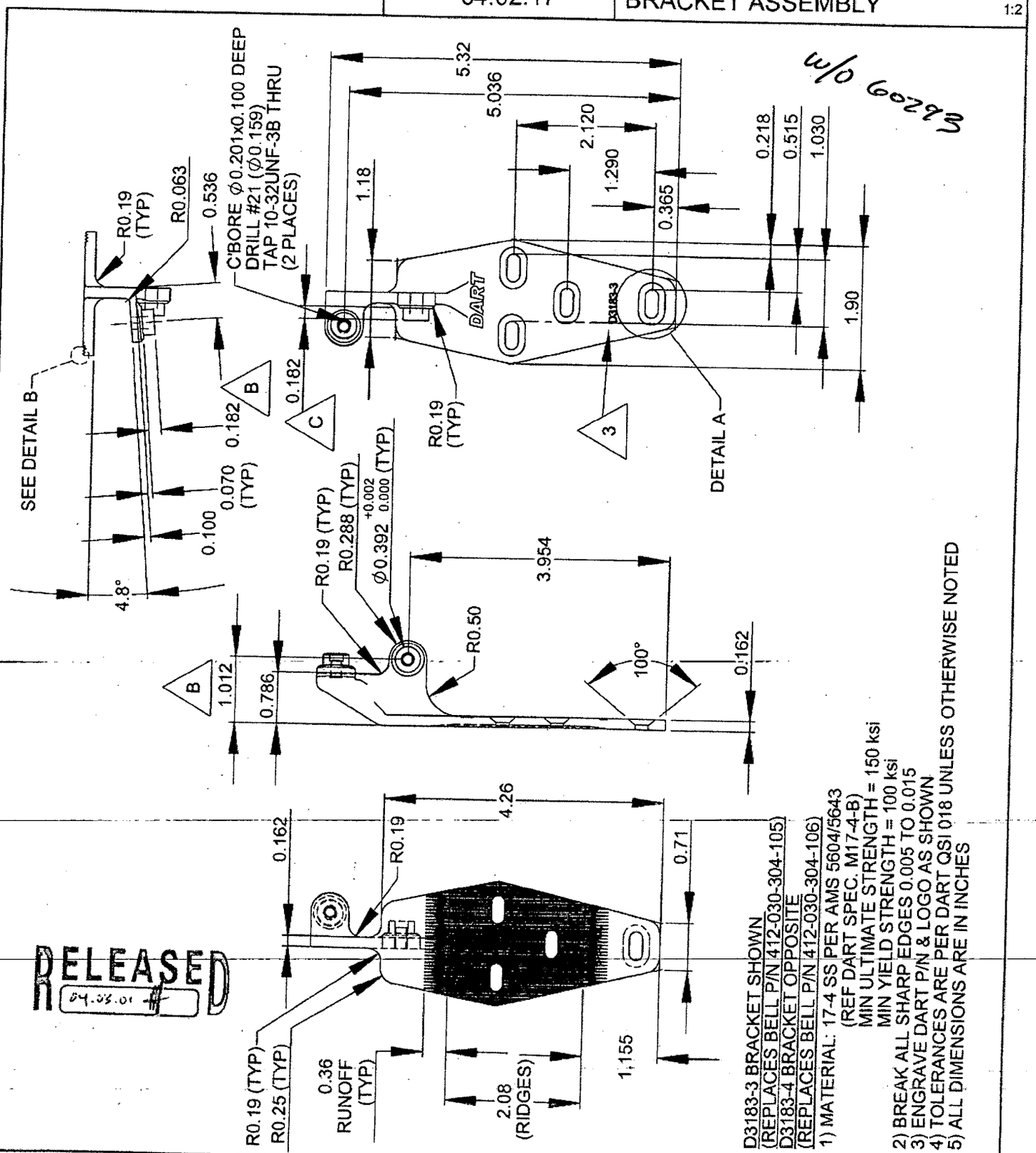
D3183-9 CAP

1) MATERIAL: DELRIN ROD, Ø1.00
(REF DART SPEC. M-DELRIN-R1.00)
2) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
3) ALL DIMENSIONS ARE IN INCHES

D3183-045 BEARING ASSEMBLY

1) ASSEMBLE D3183-5 BEARING AND
D3183-9 CAP

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3183	REV. C SHEET 3 OF 4
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:2



RELEASED
04.03.01

D3183-3 BRACKET SHOWN
(REPLACES BELL P/N 412-030-304-105)
D3183-4 BRACKET OPPOSITE
(REPLACES BELL P/N 412-030-304-106)

1) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
2) BREAK ALL SHARP EDGES 0.005 TO 0.015
3) ENGRAVE DART P/N & LOGO AS SHOWN
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
5) ALL DIMENSIONS ARE IN INCHES